



**Department of Energy**  
Office of Science  
Brookhaven Site Office  
P.O. Box 5000  
Upton, New York 11973

February 23, 2021

Ms. Sharon Hartzell  
Federal Facilities Section  
U.S. EPA - Region II  
290 Broadway - 18<sup>th</sup> Floor  
New York, New York 10007-1866

Mr. Brian Jankauskas  
New York State Department of  
Environmental Conservation  
Division of Environmental Remediation  
625 Broadway -12<sup>th</sup> Floor  
Albany, New York 12233

Dear Ms. Hartzell and Mr. Jankauskas:

SUBJECT: BROOKHAVEN NATIONAL LABORATORY (BNL) INTERAGENCY  
AGREEMENT (IAG) DRAFT ANNUAL SCHEDULES UPDATE/REPORT

This letter provides follow-up to our January 27, 2021 meeting to discuss the appropriate Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) regulatory framework for addressing Perfluorooctane sulfonate (PFOS), perfluorooctanoic acid (PFOA) and 1,4-dioxane at Brookhaven National Laboratory (BNL). After consideration of our discussions during the meeting, we recommend the following:

**Area of Concern and Operable Unit Identification**

Designate two new Areas of Concern (AOCs) that will be included under one new Operable Unit (OU) as part of the BNL Federal Facilities Agreement (FFA):

- AOC 33 – Perfluorooctane sulfonate (PFOS) and perfluorooctanoic acid (PFOA) groundwater and soil contamination with nine sub-areas
  - Sub-AOC 33A Former Bubble Chamber Experiment and Blockhouse Area
  - Sub-AOC 33B Building 924 Area
  - Sub-AOC 33C East of Building 902
  - Sub-AOC 33D Current Firehouse
  - Sub-AOC 33E Former Firehouse
  - Sub-AOC 33F Major Petroleum Facility
  - Sub-AOC 33G Building 526 Area
  - Sub-AOC 33H Recreation Center Area
  - Sub-AOC 33I Sewage Treatment Plant
- AOC 34 – 1,4-Dioxane groundwater contamination

These AOCs will be included under a new OU VIII that covers PFOS, PFOA and 1,4-dioxane remedial investigation and remedial actions. We have outlined the justification for including these AOCs in the attached document.

**Removal Action**

We recommend incorporating the current project addressing the Current and Former Firehouse PFOS/PFOA source area characterization and groundwater remediation, as a Time Critical Removal Action (TCRA) under CERCLA. This action is being undertaken to immediately reduce the highest plume contaminant concentrations and migration downgradient of these two source areas. Accordingly, we propose the following deliverables and target submittal dates:

<b>Deliverable</b>	<b>Target Date</b>
Phase 5 Characterization Work Plan	March 4, 2020 (Complete)
Time Critical Removal Action Characterization Summary Report	March 17, 2021
Design Report for PFAS Source Area Groundwater Treatment Systems	April 15, 2021
Action Memo for PFAS Source Area Groundwater Treatment Systems	April 30, 2021
Startup Report for PFAS Source Area Groundwater Treatment Systems (documents system construction completion and the results of start-up testing)	July 29, 2022

This TCRA will ultimately be evaluated for inclusion as a final action in the OU VIII Record of Decision.

**Remaining CERCLA Actions**

The Phase 4 PFAS Characterization Report that will be distributed to the regulators shortly, provides a comprehensive baseline characterization summary of PFAS and 1,4-dioxane concentrations in 360 on and off-site monitoring wells, off-site groundwater extraction wells, and treatment system influent and effluent. This characterization effort along with the TCRA characterization work will significantly reduce the scope of the remaining Remedial Investigation (RI) work.

As discussed, additional funding is required to perform the remaining work planning, RI and Feasibility Study (FS) and future remedial activities, as needed. We cannot provide a schedule at this time to commit to these activities and associated deliverables. We are committed to continue working to seek the funding required to conduct these next phases of work.

The annual Schedules Document that will be submitted in November 2021 can be used as a mechanism to update milestones depending on availability of funding. If possible, we will share schedules information prior to this timeframe.

Please let me know if you concur with this approach. If you have any questions please contact Jerry Granzen, of my staff, at (631) 344-4089.

Sincerely,

Robert P. Gordon  
Site Manager

Attachment:

BNL Justification for Proposed PFOS/PFOA and 1,4-Dioxane Areas of Concern, dated February 9, 2021

cc: J. Swartwout, NYSDEC  
T. Papura, NYSDEC  
D. O'Hehir, NYSDOH  
M. Soucie, NYSDOH  
S. Karpinski, NYSDOH  
C. Costello, NYSDOH  
A. Juchatz, SCDHS  
A. Rapiejko, SCDHS

D. Pocze, EPA  
G. Granzen, SC-BHSO  
M. McCann, GC-BHSO  
S. Coleman, BSA  
W. Dorsch, BSA  
R. Howe, BSA  
J. Remien, BSA  
A. Troutman, BSA